



"I will stand for my client's rights.
I am a trial lawyer."
—Ron Motley (1944–2013)

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September 2, 2021

VIA ECF

Hon. Richard Mark Gergel
U.S. District Court for the District of South Carolina
J. Waites Waring Judicial Center
83 Meeting Street
Charleston, South Carolina 29401

Re: *In re AFFF Products Liability Litigation*, MDL No. 2:18-mn-2873-RMG

Dear Judge Gergel:

The Plaintiff's Executive Committee ("PEC") writes regarding the Parties' disparate positions concerning the parameters of the forthcoming government contractor briefing. The Parties have reached an impasse requiring Court intervention to resolve the briefing protocol related to the government contractor motion practice and briefing.

I. PEC's Position Regarding Government Contractor Briefing Page Limitations.

The PEC submits that the number of pages of opening briefing proposed by the Defense Coordinating Committee ("DCC") is untenable. Defendants 3M and Tyco/Chemguard each request 50- page opening briefs and an additional 35 pages of Defendant-specific briefing for *each* of the following "AFFF Manufacturing Defendants": (1) National Foam, (2) Buckeye Fire Equipment Company, (3) Amerex Corporation and (4) Kidde Fenwal, Inc. Assuming each Defendant utilizes the totality of their requested pages, opening briefing by this subset of Defendants alone accounts for 275 pages of briefing.

In addition, the "Non-AFFF Manufacturing Defendants" (a category of Defendants which, to date, has not been specifically identified by the DCC), proposes three (3) omnibus briefs of 15 pages *each* in addition to individual 35-page Defendant-specific briefs."¹ Even assuming *arguendo* that three (3) omnibus briefs are submitted along with only one Defendant-specific brief (which is unlikely), Defendants' total page count would exceed 350 pages of opening briefing alone.

It makes little sense that an allegedly cross-cutting legal defense could possibly require hundreds of pages of Defendant-specific facts. The DCC's proposed briefing protocol undermines any suggestion that its now embattled government contractor defense is an all-encompassing defense that disposes of Plaintiffs' claims in one-fell-swoop. Rather, the DCC's proposed protocol

¹ The DCC's proposal identifies three Defendant types that are encompassed within the scope of the "Non-AFFF Manufacturing Defendants," but does not list the specific Defendants that are included therein.

suggest that the government contractor defense is not monolithic. Instead, *if* applicable (which the PEC submits it is not), it is case-specific.

Because the DCC's briefing proposal is excessive and overly burdensome, the PEC requests that the DCC's opening briefing be limited to one omnibus motion/memorandum of 50 pages for all moving Defendants with each Defendant being permitted a five-page Defendant-specific supplement.²

Likewise, the PEC proposes that its opening brief limited to 50 pages on its affirmative motion regarding the government contractor defense, reserving the right to move on a case-specific basis on or before June 1, 2022, in connection with the summary judgment and *Daubert* motion deadlines set forth in Case Management Order No. 19 [ECF No. 1844]. As set forth below, the PEC would move affirmatively with respect to the non-applicability of the government contractor defense on *one ground only* now, that is, that Defendants are unable to carry their burden of proof with respect to prong one of the government contractor defense, i.e., *Boyle* prong one.

II. Defendants Cannot Meet Their Burden of Proof with Respect to Boyle Prong One.

To establish immunity for a government contractor, a Defendant has the burden to establish all three prongs of *Boyle v. United Techs. Corp.*, 487 U.S. 500, 512 (1988): (1) the United States approved reasonably precise specifications; (2) the equipment conformed to those specifications; and (3) the supplier warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States.

Yet Defendants will be unable to establish *Boyle* prong *one*. Simply, either the record reflects that the United States required “reasonably precise specifications” in the formulation of Defendants’ respective products, or it did not. This analysis requires no facts about which specific AFFF product(s) may be at issue in a particular case. Rather, the Court will be presented with the AFFF MIL-Spec (“MIL-F-24385”) to determine its performance requirements, and assess whether the discovery produced to date supports a finding, as a matter of law, that the United States required AFFF manufacturers and/or others involved in AFFF production to use reasonably specific materials in the manufacture of their respective products or whether they were free to select their own materials provided the product met certain performance objectives.

The PEC's proposed government contractor briefing will demonstrate the government contractor defense to be inapplicable across all Defendant types at all times, and how and why there is simply no evidence available to contend that the United States required precise specifications in the manufacture of AFFF based on several fundamental principles. Maintaining these facts or refuting them should not require hundreds of pages of opening briefing as Defendants seek.

First, it is undisputed MIL-F-24385 is a performance specification, not a design specification. United States witness, Mr. Robert Darwin, former Director of the Fire Protection

² The PEC further submits that responsive briefs should be limited to the same page limitation as opening briefs, and a 20-page limit for reply briefs (if any).

Division of Naval Sea Systems Command (“NAVSEA”), and who is considered to be the original custodian of the AFFF MIL-Spec (“MIL-F-234385), testified as follows in this regard:

- Q. And so -- and so what's the difference between what we -- what you would call a design specification and a performance specification?
- A. Well, I would say if you were writing a specification for a specific chemical and not for the application of that chemical, you would probably include the exact chemical formulation.
- Q. That would be a design --
- A. That would be a descriptive spec, you might call it, a design spec, yeah.
- Q. Okay. And a performance spec, how would you describe a performance spec, specification?
- A. A performance specification would be more like the AFFF military specification. It would say that you have to have a product that meets certain performance without providing a chemical definition of that product or without providing a chemical description. Just, these are the performance requirements you have to meet, and it's up to the manufacturer to come up with a product that would meet that performance.
- Q. And you would say that most aptly describes the military specification for AFFF, the one we just looked at...
- A. Yes.³

Notably, similar testimony was parroted from multiple other government witnesses from both the Navy and Air Force.⁴ This undisputed evidence conclusively establishes that MIL-F-24385 is a performance specification that does not dictate product design.

Second, although a performance specification could theoretically contain a specific formula, such is not the case with MIL-F-24385, which did not include either the word PFOA or PFOS until 2017, and then, as a quantification limit, not a requirement.⁵ ⁶ Third, while the term “fluorocarbon surfactant” appears in MIL-F-24385, that term encompasses thousands of different chemicals from which the manufacturers were free to choose.⁷

³ See Deposition Testimony of Mr. Robert Darwin, dated April 28, 2021, (“Darwin Dep. Vol. I”), at 41:6-42:10, relevant pages attached as Ex. A.

⁴ See Deposition Testimony of John P. Farley, Director of Test Operations and lead AFFF qualifier at the Naval Research Laboratory, dated June 24, 2021 (“Farley Dep. Vol. I”), at 53:6-54:2, relevant pages attached as Ex. B (MIL-F-24385 is a performance specification that contains performance criteria); *see also*, Deposition Testimony of Frederick K. Walker, Jr., who worked for the Air Force for 40 years and is the Chief Fire Protection Engineer for the Air Force, dated May 19, 2021 (Walker Dep. Vol I”), at 74:4-75:21, relevant pages attached as Ex. C (agreeing with Mr. Darwin that MIL-F-24385 is a performance specification).

⁵ See NAVY01-000000904-13 (MIL-F-24385 (1969)), at attached as Ex. D (original AFFF MIL-Spec).

⁶ See DOD01-000005595-612 (In September 2017, MIL-F-24385 was updated to include a maximum concentration of PFOA and PFOS), attached as Ex. E. Prior to September 2017, MIL-F-24385 did not mention these chemicals.

⁷ See 3M_AFFF_MDL01863928, at 32 (as of 1952, thousands of fluorocarbons were known), relevant pages attached as Ex. F; *see also*, 3M_AFFF_MDL00579820, at 21 (Popular Mechanics article noting that as of 1952, it was “theoretically possible to produce around a trillion fluorocarbon compounds that were being produced in “one corner of a new building erected by” 3M), attached as Ex. G.

Third, the fluorosurfactant in Defendants' AFFF is *never* identified for an end user and is referred to only as a "trade secret" in the product labeling and communications with the government. United States witness, John Farley, the Director of Fire Test Operations at the U.S. Naval Research Laboratory ("NRL"), and lead qualifier for AFFF products at NRL, testified as follows in this regard:

- Q. All right. Let's go on and continue. It goes on to say, "In fact, neither NRL nor the Navy are told which fluorosurfactants are included in AFFF products. That information is a trade secret protected by each manufacturer." Did I read that correctly?
- A. Yes.
- Q. And that is a true and accurate statement; fair to say?
- A. Yes.
- Q. Okay. So y'all don't even know which particular surfactant was in any of these AFFFs because it was maintained as a trade secret; fair to say?
- A: Yes, that would be considered proprietary information.⁸

When asked whether the selection of a fluorosurfactant was left to the discretion of the manufacturer, Mr. Darwin stated "I think the way we've always looked at it is it was up to each manufacturer to come up with his own magic witch's brew to meet the performance requirements."⁹ Logically, if the AFFF recipes are proprietary and the government does not know the precise constituents, then those constituents cannot be government mandated.

Finally, at all times, Defendants could have met the specification without using PFOA or PFOS. A non-C8 derived AFFF product was on the Department of Defense's ("DoD") Qualified Product List ("QPL") in 1982, which was based on 95-plus percent C6-based fluorosurfactants,¹⁰ and proves that MIL-F-24385 does not require the use of PFOA or PFOS or any other C8-based precursor product.¹¹

In sum, the unrefuted evidence confirms the United States did not have reasonably precise specifications for the manufacture of AFFF that included the use of PFOA, PFOS and/or their precursors. Summary Judgment against Defendants viz. *Boyle* prong one will render the defense inapplicable across all cases in this MDL. That being the case, there would be no need for further

⁸ See Farley Dep. Vol. I, at 70:5-25, relevant pages attached as Ex. H.

⁹ Darwin Dep. Vol I., at 46:17-47:2, relevant pages attached as Ex. I; *see also*, Declaration of Ronald Sheinson, NRL Research Chemist from 1970 to 2010, dated June 10, 2021, at ¶ 3 (NRL "does not conduct tests to determine the chemical constituents of AFFF, as each AFFF manufacturers' precise chemical formulation is proprietary information."), attached as Ex. J.

¹⁰ See Kleiner Dep. Ex. BB556, at 2 (identifying Ansul's Ansulite 6% AFFF/AFC-5 as being on the QPL as of 1982), attached as Ex. K; *see also*, Deposition of BASF witness Todd Thomas, Ph.D., dated September 16, 2020, at 106:10-107:22 (the two fluorosurfactants incorporated into AFC-5, namely, Lodyne S-103 and Lodyne 81-84, are based on Lodyne 920A mercaptan that is fractionated into multiple cuts, including 921A, which is a mercaptan used to make Lodyne surfactants 81-84 and S-103, which are 95-plus percent C6-derived fluorosurfactants), relevant pages attached as Ex. L. Of note, this C6-derived AFFF formulation did contain trace levels of C8 precursors.

¹¹ Ironically, Defendants' claim that PFOA and/or PFOS result as *unintended* byproducts of the manufacturing process of AFFF underscore *ipso facto* they could not have been government mandated.

case-specific briefing. Conversely, should the Court deny the PEC's affirmative motion and find that questions of fact exist with respect to whether the government provided reasonably precise specifications, then, as noted above, Plaintiffs could again move on or before the dispositive motion deadline on a case-specific basis to show why with respect to a particular set of factual circumstances the defense does not apply; and Defendants too could attempt to do so in the context of a specific case.

III. Case-Specific Facts Render the Government Contractor Defense Inapplicable.

Should the Court deny the PEC's affirmative motion, significant factual nuances exist between cases to defeat the defense in a particular context. These nuances could include, *inter alia*, the particular AFFF product(s) at issue in a specific case (*e.g.*, MIL-Spec grade foam versus Non-MIL-Spec grade foam), the purpose for which the AFFF was used (*e.g.*, firefighting training exercises versus extinguishment of an actual fire), and even the timeframe of AFFF use (*e.g.*, AFFF use before versus after the issuance of the Environmental Protection Agency's Health Advisory Level ("HAL")).

For example, one Water Provider Bellwether Discovery Pool case, *City of Stuart, Florida v. 3M Company et al.*, No. 2:18-cv-3487, has identified National Foam's Universal Gold¹² as one of the AFFF's used by Stuart Fire and Rescue. Importantly, National Foam's Universal Gold, (at one time National Foam's most highly demanded product) is a non-MIL-Spec grade foam.¹³ Because it did not need to meet MIL-Spec requirements, the government contractor defense would be unavailable to National Foam in that and similar instances (that are, of course, case-specific).

Further, the record likewise demonstrates that most AFFF dispersed into the environment is dispersed during training exercises rather than actual emergency fires.¹⁴ To the extent a particular Plaintiff's drinking water supply was contaminated as a result of training exercises, rather than an actual fire, then there was no reason that a foam containing a fluorinated compound needed to be used, and no requirement that a MIL-Spec grade foam be used. In fact, the Fire Fighting Foam Coalition ("FFFC"),¹⁵ as of May 2016 published a "Best Practice Guidance for Use of Class B Firefighting Foams," that recommends to "[u]se training foams that do not contain

¹² See *e.g.*, Stuart_2:18-cv-03487_00022752 (invoice identifying purchase of National Foam's Universal Gold by Stuart Fire and Rescue), attached as Ex. M.

¹³ See Deposition Transcript of National Foam witness David Plant, dated May 27, 2021, at 246:9-16, 361:9-10, 273:713, 274:20-24, relevant excerpts attached as Ex. N.

¹⁴ See 3M_BELL00985788, at 97 "[t]he percentage of foam production used to fight fires is relatively low, estimated to be 5% to 10%, but is not validated with data. The other 90% or is used for training, system testing, accidental discharge, replacement of contaminated or obsolete stock, or stored in new systems", attached as Ex. O; see also Deposition Testimony of National Foam witness Anne Regina, dated December 1, 2020 ("Regina Dep."), at 271:2-7 (training exercises is the greatest source of C8 contamination from AFFF), relevant pages attached as Ex. P.

¹⁵ The FFFC describes itself as a "coalition of industry leaders formed to represent manufacturers, distributors and users on issues related to the efficacy and environmental impact of fire fighting foam." See <https://www.ffc.org/> (last accessed on September 1, 2021). The FFFC's membership includes *inter alia*, Ansul, Chemguard, Dynax, National Foam, Fire Service Plus and Solberg, all defendants in the AFFF MDL. The FFFC routinely speaks for its members.

fluorosurfactants for training purposes.”¹⁶ Had AFFF manufacturers marketed training foams without fluorinated compounds for use in training, then C8 contamination resulting from the use of AFFF would be significantly less prevalent today. In short, none of the cases where alleged AFFF contamination resulted from training (rather than an actual fire) could have the government contractor defense apply, since MIL-Spec AFFF was not required for those training exercises.

Boyle prong two requires that the AFFF product(s) at issue conform to the alleged government-mandated precise requirements. AFFF products that did not meet MIL-Spec performance requirements fall outside the protection of the defense. The most important of these requirements is that the AFFF be able to put out Class B liquid fuel fires in thirty seconds or less.¹⁷

REDACTED¹⁸ REDACTED¹⁹
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To the extent an AFFF product at issue in a particular bellwether case is a product that was removed from the QPL during the relevant use period, the government contractor defense is inapplicable. This is because the AFFF failed to conform to the purported specifications as required under *Boyle* prong two (assuming *arguendo* that the alleged specifications exist, which the PEC submits they do not).²²

With respect to *Boyle* prong three, the extent of knowledge that the United States government possessed concerning the toxic properties of PFOA and/or PFOS (and their precursors) evolved over time with respect to each compound, and to the extent they gained knowledge over time, such knowledge was diluted by numerous Defendant representations, espoused to this day, that these chemicals were and are not toxic to humans.

The Defendants never even identified the fluorinated surfactants. Even when the government asked Defendants for product formulations, Defendants refused, maintaining “trade secret” status.²³ Defendants cannot, therefore, reasonably assert that they warned the government

¹⁶ See May 2016, FFFC Best Practices Guidance for Use of Class B Firefighting Foams, at 2, attached as Ex. Q.

¹⁷ See Declaration of John P. Farley, dated April 30, 2021, at ¶ 13 (as of 1981, the MIL-Spec required that AFFF products extinguish fires within thirty seconds), attached as Ex. R.

¹⁸ See Deposition Transcript of Tyco witness Phillip Novac, dated March 18, 2021, (REDACTED) at 113:6-14, relevant pages attached as Ex. S.

¹⁹ FF_NAVY08_0000222 (Farley Ex. DL1431), attached as Ex. T.

²⁰ Farley Dep. Vol. I, at 138:14-139:11, relevant pages attached as Ex. U.

²¹ *Id.* at 139:12-16, relevant pages attached as Ex. V.

²² A similar incident occurred in 2014 with respect to a Chemguard QPL-listed product Chemguard 601MS (DL1141). See Deposition Transcript of Phil Novac, dated March 19, 2021, at 406:14-414:14 (REDACTED)

(REDACTED), relevant pages attached as Ex. W.

²³ See Darwin Dep. Vol. I at 50:12-51:4, relevant pages attached as Ex. X; *see also*, Farley Dep. Vol I., at 70:5-16, relevant pages attached as Ex. Y.

of all the dangers associated with chemicals they never even named. For example, with respect to PFOS, **REDACTED**²⁴ and the active ingredient in its AFFF, LightWater®, prior to 3M's announcement of its phaseout of C8 chemistries in May 2000, the government was unaware of any evidence of potential adverse human health effects relating to PFOS and/or AFFF.²⁵ Notably, even at the time of phaseout when the government became aware that PFOS was in AFFF, 3M was still assuring the public that PFOS did not pose a threat to human health or the environment.²⁶ Moreover, this is still 3M's position today.²⁷ As such, the government was indisputably misled by the Defendants' own words and thus obstructed from fully understanding the dangerous propensities of PFOS, even arguably to this day.

With respect to PFOA, the issue of government knowledge is even murkier. This is because other AFFF manufacturers who use telomer-derived²⁸ fluorosurfactants in their AFFFs were inaccurately informing the government and end users both individually, and through its industry-group the FFFC, that their AFFFs contained neither PFOS or PFOA.²⁹

The United States government reasonably relied on such representations by the telomer-based AFFF manufacturers and the FFFC. Mr. Darwin testified that the AFFF telomer manufacturers led the government to believe their AFFF products were PFOA free.³⁰ As a result,

²⁴ See Deposition Testimony of John Butenhoff, Ph.D., dated July 24, 2020, at 520:11-22 (**REDACTED** relevant pages attached as Ex. Z).

²⁵ See e.g., Declaration of Robert L. Darwin, dated September 8, 2020, at ¶¶ 35-36 (prior to 2000, Mr. Darwin was unaware of any adverse human health impact from AFFF), attached as Ex. AA; see also Declaration of Chief Fire Protection Engineer for the Air Force, Frederick Walker, at ¶ 32 (declaring that prior to 2000, he had never even heard of the chemical PFOS), attached as Ex. BB.

²⁶ See 3M_AFFF_MDL00207575 (May 2000, 3M phaseout announcement alerting the public of the phaseout of C8 chemistries and stating that "[a]ll existing scientific knowledge indicates that the presence of these materials at these very low levels does not pose a human health or environmental risk"), attached as Ex. CC.

²⁷ See https://www.3m.com/3M/en_US/pfas-stewardship-us/health-science/ (3M's website currently states "[t]he weight of scientific evidence from decades of research does not show that PFOS or PFOA causes harm in people at current or past levels.") (last accessed September 1, 2021).

²⁸ The telomerization process used by certain Defendants to manufacture certain components of AFFF. This process is the alternative to the electrochemical fluorination ("ECF") process, which was patented and used by 3M to manufacture PFOS, the surfactant used in 3M's AFFF products prior to its phaseout of such chemistry.

²⁹ See e.g., NF000063181, attached as Ex. DD (In 2011, Defendant Kidde Fire Fighting claimed that both its National Foam and Angus AFFF product lines were made using telomer-based fluorinated surfactants, which "are not made from PFOA-based chemicals nor are any PFOA-based product added in the manufacturing process."); see also, Regina Dep., at 294:3-13 (National Foam was telling its customers that its products were not made with PFOA), attached as Ex. EE; **REDACTED**

REDACTED through the FFFC, Defendants spread this propaganda claiming in a presentation to the EPA that telomer-based AFFF does not contain any PFOA-based products. See AFFF-MDL-CHE-00000886, at 911, attached as Ex. HH.

³⁰ See Testimony of Robert Darwin, dated April 28, 2021, at 192:14-193:7, attached as Ex. II (telomer-based AFFF manufacturers "were leading the world, including the United States government, to believe that these aqueous film-forming foams that were on the QPL did not contain PFOA or their precursors...."); see also, Deposition Testimony of Frederick Walker, dated May 21, 2021 ("Walker Dep. Tr. Vol. III"), at 718:2-15 and 721:14-722:1 (**REDACTED**)

both the DoD and the EPA considered the telomer-based manufacturers to be a potential “solution” to the PFOS problem as Mr. Walker testified that it was the government’s belief that the AFFF telomer manufacturers were offering a solution to the phaseout of PFOS.³¹

Of course, now it is clear that although PFOA may not be intentionally added to telomer-based AFFFs (in most cases), these AFFFs nonetheless contain fluorosurfactants made of eight-carbon molecules (C8s or PFOA precursors) that degrade to PFOA in the environment, an important fact the telomer Defendants failed to initially inform the government of. Because these precursors were later learned to degrade to PFOA, they were eventually included within the scope of the EPA’s 2010/2015 PFOA Stewardship Program, requiring essentially a complete reduction of PFOA by the end of 2015.³² Further, it was not until the EPA’s issuance of its HAL of 70ppt combined for PFOA and PFOS in May 2016, that AFFF consumers, including the government, had any understanding of a quantification level that would render exposure to these toxic chemicals potentially harmful to humans. Arguably this is the earliest time that one could claim that there was full knowledge by the government of potential adverse effects of PFOS and PFOA, although Defendants, to this day deny any harmful effects associated with PFOS and PFOA at the levels historically found in humans and the environment.³³

The Defendants cannot have it both ways, that is, on the one hand claim that the government had full knowledge of the toxic effects of PFOA and PFOS (and their precursors), and on the other hand, claim that there are no harmful effects associated with these chemicals. But, if so, the Defendants have actually created an issue of fact with respect to the level of government knowledge regarding the toxicity of these compounds. What is clear is that that the knowledge prong of *Boyle* is a goal post that is continually moving even today as these lawsuits continue to uncover the extent of the Defendants’ historical knowledge of the dangerous propensities of PFOS and PFOA and their chemical precursors.

To address these issues, the PEC intends to move affirmatively, at this time, only with respect to prong one of *Boyle*, to establish that Defendants are not able to carry their burden with regard to prong one, and that it be permitted 50 pages of opening briefing to so move. The PEC further requests that should the Court deny its affirmative motion, that it be permitted to move on a case-specific basis in accordance with the dispositive motion deadlines set forth in CMO 19. Finally, the PEC further requests that the DCC’s opening briefing be limited in scope to a manageable page limitation (e.g., 50 pages and individual Defendants be permitted five-page Defendant-specific supplements).

attached as JJ.

³¹ See Walker Dep. Tr. Vol. III, at 710:25-711:18, attached as Ex. KK (initially EPA and DoD believed the telomer manufacturers were a potential “solution set” to 3M’s phaseout of PFOS).

³² See PFOA Stewardship Program, attach as Ex. LL, at 3 and 11 (noting that the scope of the program includes PFOA precursor chemicals, which includes chemicals manufactured through the telomer manufacturing process).

³³ See e.g., note 27, *supra*; see also., National Foam’s Answers and Objections to Plaintiffs’ First Set of Interrogatories, at 33, attached as MM (responding that “at the levels PFOA and PFOS are found in the environment, the current body of scientific knowledge and study does not establish a causal link between PFOA and/or PFOS and adverse human health or toxicological effects).

Respectfully submitted,

A handwritten signature in cursive script, reading "Fred Thompson III". The signature is written in dark ink and is positioned above the printed name.

Fred Thompson, III
Plaintiffs' Liaison Counsel

Encl.

cc: All Counsel of Record (by ECF)
Blaise N. Barber, Esq. (via email)(Blaise_Niosi@scd.uscourts.gov)